

Manufacturing in Texas



2013





Manufacturing is a vital component of the Texas economy, accounting for 15% of the state's GDP and 8% of employment in 2012. As a result, the overall Texas economy benefits greatly from a strong and internationally competitive manufacturing sector.

The manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. Texas manufacturing is perhaps best known for its world-class petroleum refining and chemical industries.

While oil & gas-derived products remain an important pillar of the state's manufacturing portfolio, Texas also boasts a diverse industrial base with significant activity in advanced manufacturing sectors such as computers, semiconductors, aerospace products, and motor vehicles.

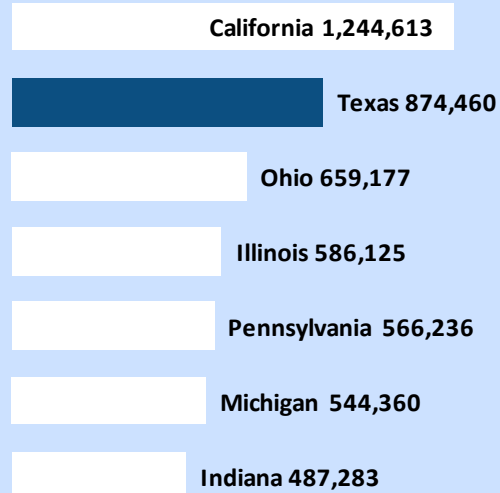
Thanks to the state's strong business climate, skilled workforce, low-cost natural gas supplies, and low

taxes, Texas is expected to continue the broad-based growth in manufacturing employment, exports, and output the state has experienced in recent years.

Manufacturing Growth 2011-2012

Employment: +2.5%
Exports: +8.0%
GDP: +9.1%

Texas Ranks No. 2 in the U.S. in Total Manufacturing Employment



Texas Manufacturing Totals

Firms	19,493
Employment	874,460
Average Annual Wage	\$71,500
Total Capital Investments	\$17.6 billion
Value Added (GDP)	\$211.0 billion
Value of Shipments	\$671.4 billion
Manufacturing Exports	\$250.4 billion

How Texas Ranks in U.S. Manufacturing

All Employees	No. 2
Production Workers	No. 2
Total Capital Investments	No. 1
Value Added (GDP)	No. 2
Value of Shipments	No. 1
Exports	No. 1

Sources: U.S. Census Bureau, Texas Workforce Commission, Bureau of Economic Analysis, Bureau of Labor Statistics

Texas Manufacturing Employment

2013

- Texas ranks No. 2 in the nation for manufacturing employment with nearly 875,000 workers as of Q4 2012. This marks a 2.5% increase from a year earlier.
- Within the Texas manufacturing workforce, over 37% are employed in three sectors with a broad distribution across the state: fabricated metal products, machinery, and food manufacturing.

Texas Workforce Concentrations

In Texas, the workforce is significantly more specialized than in most other states in the following manufacturing sectors:

Petroleum Refining	+177%*	Aerospace Products	+19%
Communications	+47%	Chemicals	+14%
Semiconductors	+40%	Fabricated Metal	+14%
Computer Equipment	+24%	Machinery	+13%

*In each sector, the percentage by which Texas exceeds the U.S. average in workers per capita

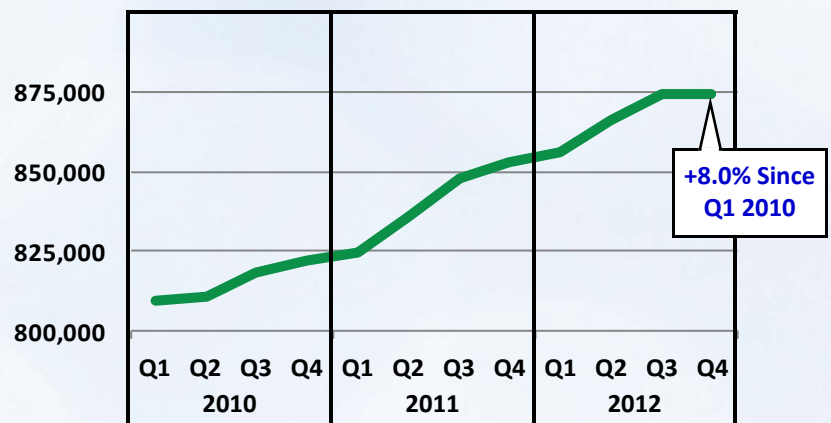
Top 5 Manufacturing Sectors for Job Growth in Texas

Q4 2011 to Q4 2012

Fabricated Metal:	+7.0%	
Chemical Resins:	+6.8%	
Machinery:	+6.3%	
Electrical Equip.:	+5.7%	
Pharmaceuticals:	+4.6%	

Manufacturing Job Growth Post-Recession

Q1 2010 to Q4 2012



Texas Manufacturing Employment by Sector

Fourth Quarter 2012

Sector (Industry Code)	Employees	Firms	Average Annual Wage
Fabricated Metal Product Manufacturing (332)	135,393	4,258	\$63,596
Machinery Manufacturing (333)	104,558	1,787	\$89,752
Food Manufacturing (311)	87,235	1,673	\$41,392
Aerospace Manufacturing (3364)	52,589	180	\$87,984
Semiconductor and Electronic Components Mfg. (3344)	43,164	349	\$99,268
Plastic & Rubber Products Manufacturing (326)	37,857	708	\$52,104
Other Manufacturing Sectors	413,664	10,538	\$72,605
TOTAL MANUFACTURING (31-33)	874,460	19,493	\$71,500

Source: Texas Workforce Commission, Bureau of Labor Statistics

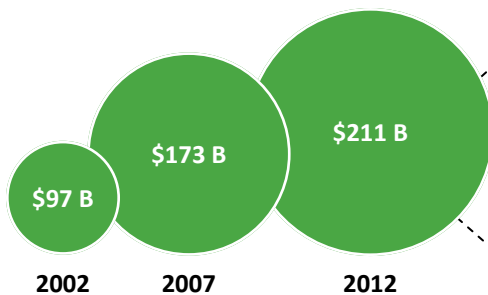
Texas Manufacturing Output

2013

- Texas ranks No. 2 in the U.S. for manufacturing output, as measured by gross domestic product (GDP), with a value of \$211 billion in 2012.
- The Texas' manufacturing GDP is rapidly expanding—increasing 9.1% between 2011 and 2012 and more than doubling since 2002. This decade-long growth was led by three sectors: petroleum products, machinery, and chemicals.
- Texas leads the nation in petroleum refining and chemical production; these two sectors account for 47% of the state's total manufacturing output.
- Computer & electronic products (which includes semiconductors, communications equipment, and electronic instruments) and machinery together contribute nearly a quarter of the state's manufacturing GDP.

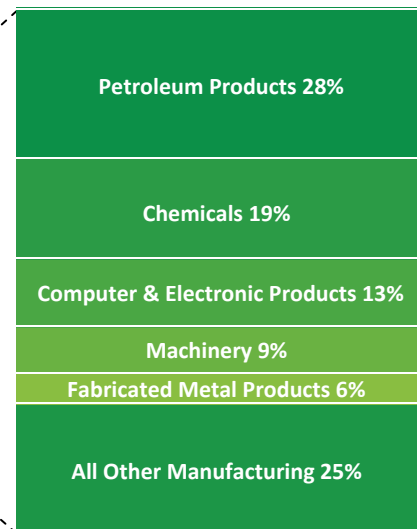
Manufacturing Output Growth

Texas manufacturing output, measured by GDP, has grown from \$97 billion to \$211 billion over the past decade, an increase of more than 118%.



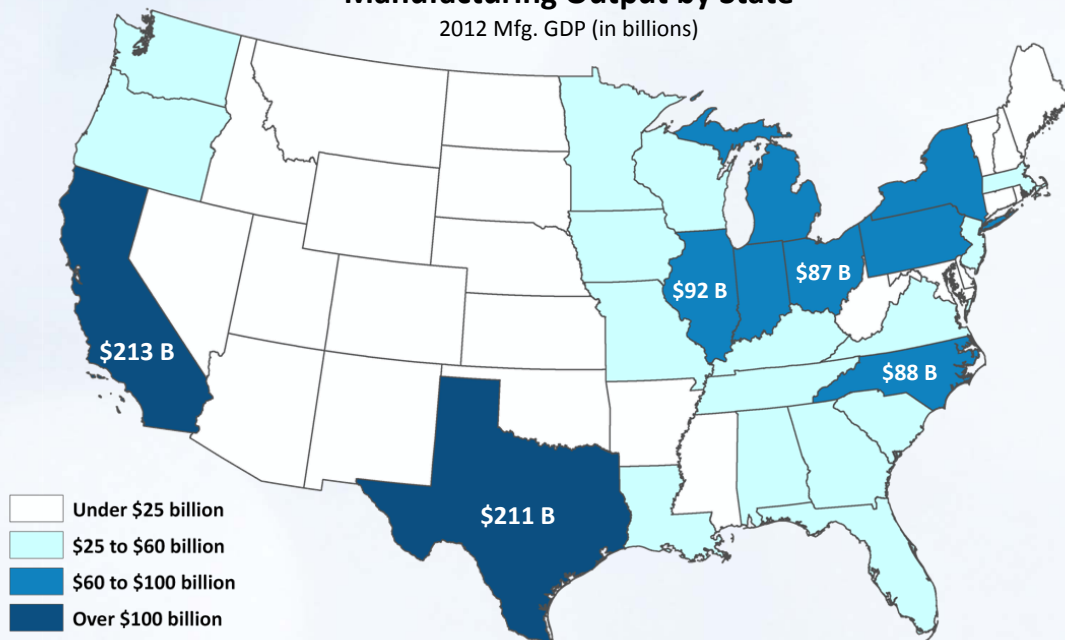
Source: Bureau of Economic Analysis

Output by Sector



Manufacturing Output by State

2012 Mfg. GDP (in billions)



Source: Bureau of Economic Analysis

Texas Manufacturing Exports

2013

- Led by the manufacturing sector, Texas has held the title of No. 1 exporting state for eleven consecutive years. In 2012, Texas shipped over \$250 billion in manufacturing exports, an increase of 8% from 2011. Overall, Texas accounts for 18.6% of U.S. manufacturing exports, nearly double No. 2 California.
- Manufactured products make up nearly 95% of overall Texas exports. The remaining 5% is mainly comprised of crude oil, natural gas, and farm products.

- Over the past decade, the value of Texas exports has more than doubled in value, surging 167% between 2003 and 2012. This growth was led by increases in the export of petroleum products, machinery, and basic chemicals.

Nearly 19% of U.S. manufacturing exports ship from Texas ports.

- Texas is the top exporting state to neighboring Mexico, as well as to most world regions, including Europe, Africa, South America, Central America, and the Middle East.

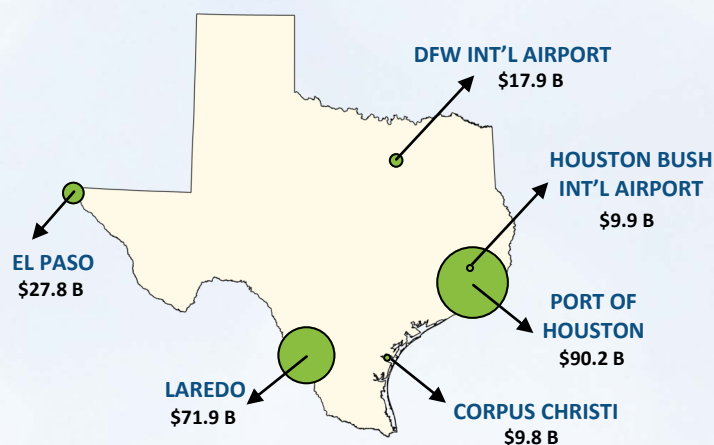
Manufacturing Exports on the Rise

(in billions)

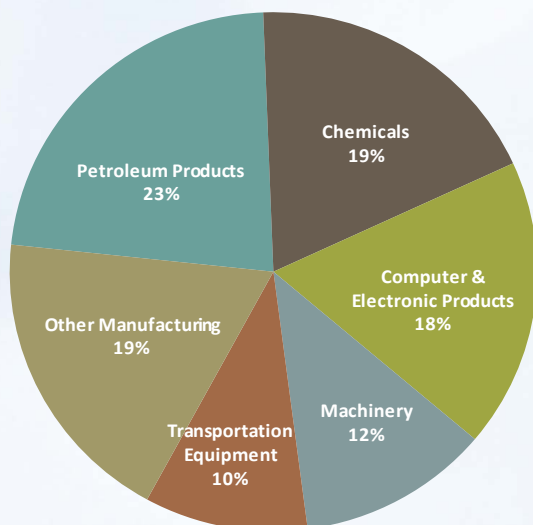


Top Ports for Manufacturing Exports

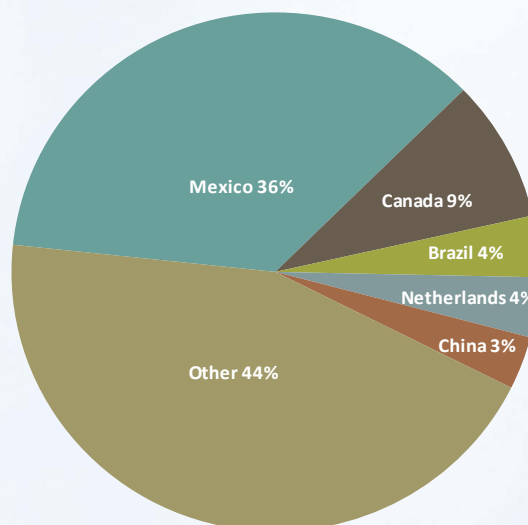
2012 total value of international shipments (in billions)



Top Export Sectors



Top Export Markets



Sources: U.S. Census Bureau, WISERTrade, U.S. International Trade Administration

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Big Stories from Texas 2012-2013

The Largest Business Expansions and Relocations



Sector-Specific Fact Sheets:

